

Minutes of SPIRE Project Team Meeting 18
SPIRE-RAL-MOM-001059
RAL 19 November 2001

Present: Matt Griffin, Eric Sawyer, Bruce Swinyard, Ken King

Topics.

IBDR preparations
 Report on telescope meeting
 RF filters
 Coming DDRs
 CQM test plan meetings

1 Review of outstanding actions from previous meetings

No. PT-04-0570	Actionee	Description	Priority	Deadline	Status
01	KJK	Write WE integration and test plan	High	Oct. 2001	Still Open. Needed for IBDR.

No. PT-10-0682	Actionee	Description	Priority	Deadline	Status
04	MJG	Arrange for QMW to evaluate filter suppression.	Medium	May 31	Open, not yet documented in the SSRD

No. PT-12-0726	Actionee	Description	Priority	Deadline	Status
02	EC KJK	Update the document management plan to reflect the new scheme for interaction of institute PMs with the documentation configuration control system.		June 29	Still open, action being taken This is an action on Ken

No. PT-13-0772	Actionee	Description	Priority	Deadline	Status
04	BMS DKG	Bruce and Doug to talk to John and distribute a draft list of documents showing approval status.		3/8/01	In progress
06	MJG	Matt to meet with Ken to discuss the outstanding MOUs		3/8/01	Open, Matt to have at least a contents list ready for Ken's return.
07	DKG	Check scope for		27/7/01	Closed,

	JD	increasing the thermal load on the detector box JD to look at the fraction of the 2-K load that is due to the 2-K box			
11	ECS	Outline new document scheme to the consortium			Open, check new proposals, and circulate note.
12	KJK	Ask for copy of PACS MOU		31/7/01	closed
13	ECS	Seek confirmation of DDR dates		27/7/01	closed

No. PT-15-0824	Actionee	Description	Priority	Deadline	Status
02	ECS	Review product tree		12/9/01	Open
05	ECS	ES to let JB know that current version of the DDD is not to be updated until the IBDR.		30/8/01	closed

Actions raised during this meeting

No. PT-16-0862	Actionee	Description	Priority	Deadline	Status
01	DG	Doug to inform consortium that 1030 Cernox is the baseline temperature sensor		20/9/01	Open
02	BMS	RAL (Bruce) to write a DRCU reliability spec at the channel level which also defines a failure.		20/9/01	Open
04	ECS	Send costs of cold vibration tests to LAM and CEA.		30/9/01	Open
08	CEA/ SAP	CEA to check when harness information is required.		30/9/01	Open
09	RAL	FPU simulator, RAL to check if there is a requirement for a delivery of two units.		30/9/01	Closed, we need two, CEA to be informed.

10	RAL	Warm interconnect harness. (DRCU to DPU) One delivered with QM1, is another harness required for QM2? RAL to clarify		30/9/01	Open
11	BMS	Put on Livelink The version of the BDA SSSD, taken by Matt from JPL		30/9/01	Open
15	SAP	Provide provisional mass breakdown for the meeting on 25/9/01		24/9/01	Open
16	MJG	Clarify with KJK when the ICC workpackages will be defined		30/9/01	Open
17	JD	Check general robustness of P/LW photometer array and take this into account in harness partitioning			Open

2 Project Management Issues

JPL financial situation.

Worst case is no FS from JPL.

Possible scenario is not tested FSs .

Project team should asses acceptable levels of testing for spares.

2.1 IBDR preparations

2.2 Management Reporting and Control

Arrangements for management of the DCU development programme are being drawn up by SAP and JPL.

2.3 Document change and configuration control

2.4 PA

2.5 Business Agreements

2.6 Schedule:

3 Instrument Issues

Micro vibration.

Latest analysis indicates that a likely input is now approx 30 micro g. This is a factor of 30 less than the previous figures.

Build standard of STMs needs to be defined for all subsystems. ECS to progress.

3.1 Structure

3.2 Mirrors

3.3 Detectors

RF filters.

Telecon with MSSL, concept for new filter box bone by MSSL, will be sent to Bruce to avoid direct interface between MSSL and JPL.

Final concept will be sent to JPL by Matt, stating that no further changes will be allowed.

JFET strapping to 38K stage is not to be pursued.

Isolation between SOB and HOB could be reviewed with advantage.

3.4 OBS and Instrument Control

3.5 DPU

3.6 DRCU and related issues (Sap)

4 ICC Issues

Meeting to discuss 'end user products' in week 17 to 21 December. Ken to set up.

5 Meetings:

HST.

Presentations on interactive analysis system from HFI and PACS.

PACS wish to get a system working asap, based on IDL and Java.

SPIRE prefer as system based on public domain software, e.g. Java.

A pipeline system is more likely than a true interactive system. This should provide a map of position and flux with error bars on both. Knowledge of the instrument should not be a prerequisite for a user. Commonality between PACS and SPIRE is required because they will be frequently used together.

Go/no go criteria for flight spare discussed.

Parallel mode operations discussed, Matt to write note.

Data rate 140Kbits/sec is now likely.

Project team at ESTEC is now complete, Gerry Crone is payload system manager.

PDR mid next year.

SRR outcome discussed.

Instrument resources, particularly mass was discussed.

Thermal model of the cryostat is expected at the end of November, but is likely to be only a static model, **ECS to check with Jean Bruston**

EQM meeting will be attended by Thomas Passvogel.

Cryo vib facility has had its PDR and will be ready on time. A test is expected to take two weeks.

PACS are using CFRP and titanium supports.

PACS are assuming a total harness length of 14 m.

PACS schedule, no change.

Financial problems at JPL are serious. Not providing spares is regarded as an unacceptable risk.

CQM will be delivered October 2002.

Band 6 HIFI review is planned for Dec 3/4th, the HST will support the retention band 6.

Results of JPL tiger team will be available by Dec 3/4th.

Calibration groups terms of reference was discussed.

Optical systems meeting. 14/11/01

Attended by Kjetil Dohlen, Bruce Swinyard and Tony Richards.

Astrium gave good presentation.

Telescope design has a 560 diameter hole that will be filled in by MLI with low emissivity surface.

Details not defined in detail. A tbd baffle is also proposed.

There will be a hole in the secondary, a sharp edge is preferred by SPIRE.

Cryostat optical model is based on a very old model and bears little relation to the current design.

SPIRE will use our own stray light model.

5.1 Detailed design Reviews

Draft report issued for

5.1.1 DDR summary

- Mirrors: Complete
- FTS: 22/23 Nov 2001.
- DRCU/WIH 12/13 December.
- Structure/thermal straps 29/30 Nov 2001
- DPU: 6/7 Dec
- AIV 6/9/01, delta review required, to include egse.
- EGSE: TBD, see above
- BDAs:/JFETs Complete, ICD, FMECA and PA map outstanding
- Filters/calibs: 18/9/01, Complete
- BSM: 30/7/01 not all issues closed out, delta review on 23/8/01, complete
- OBS Requirements review required. Probably Nov
- Shutter PDR: July 17, Almost a DDR, some aspects still open.
- Cooler Complete, some RIDs to be signed off.
- DRCU simulator TBD, awaiting spec from Sap.

Structure.

ECS to chair, Bruce, ESTEC, Chris Jewell, Thijs van der Laan, Chris Costelli, possibly RAL. Possibly Leicester.

DPU.

Separate reviews for the three instruments.

Ken, John or Steve Guest. Possibly someone from Saclay (Christoph). Possibly Albrecht de Jong (HIFI)

DRCU.

Stage one 12 and 13 Dec. Eric, Bruce, John. Possibly Matt, Jean Bruston may attend.

Stage two in January, board; John, Electronics expert from HIFI or PACS? Riccardo Cerulli. Otto?

IBDR

Plan reviewed

6 Progress on Open Issues

7 AOB

Next meeting

10 December

19 December